Remarks

Applicants have received and carefully reviewed the Office Action mailed September 28, 2006. Claims 1-30 are pending, with claims 1-5 and 16-30 withdrawn from consideration. Reconsideration and reexamination are respectfully requested.

Rejection under 35 U.S.C. § 102(b)

Claims 6 and 8 remain rejected as being anticipated by Vojak et al. (US 2002/0113553). In response to Applicants' previous amendment and arguments, the Examiner asserts that Vojak et al. does disclose first and second electrodes substantially contained within a channel. Applicants respectfully disagree and submit that the Examiner's interpretation of the phrase "substantially contained" is contrary to that understood by one of ordinary skill in the art and is also contrary to that which the skilled artisan would arrive at having read the instant specification.

The Examiner asserts that Vojak et al. disclose <u>portions</u> of first and second electrodes contained within a cavity, as shown in FIG. 1A. The Examiner then asserts that if the electrodes of Vojak et al were not contained within the channel, the microdischarge device would not provide any discharge, and the device would not work. The Examiner then asserts that because the device of Vojak et al. will not function properly without the portions of the first and second electrodes being contained within the channel, the <u>portions</u> of the electrodes in the channel are considered to be substantial, therefore the electrodes of Vojak et al. are considered to be "substantially contained" within the channel, as claimed.

Applicants respectfully disagree with the Examiner's interpretation of "substantially contained within" the channel. As the Examiner acknowledges, Vojak et al. teach <u>portions</u> of electrodes 14 in channel/cavity 16 (see FIG. 1A). Applicants submit that one of ordinary skill in the art would not interpret "electrodes are substantially contained within the channel" as meaning that <u>portions</u> of the electrodes are required to be in the channel, as appears to be the Examiner's interpretation. The dictionary definition of "substantial" as it is used in the context of the claims

is "being largely but not wholly that which is specified"; see attached printout from Merriam-Webster online dictionary. Thus, the electrodes being "substantially contained within" the channel would be interpreted by one of ordinary skill in the art as the electrodes being largely contained within the channel. Applicants submit that one of ordinary skill in the art would not interpret the small portion of the electrodes 14 of Vojak et al. in the cavity 16 as having the electrodes substantially contained within the cavity. Vojak et al. specifically teach:

horizontal electrode portions 14b that extend to contact the cavity 16. The horizontal electrode portions 14b preferably <u>surround</u> an entire circumference of the cavity 16 (if it is a circular cavity), i.e., the cavity 16 penetrates the electrode portions 14b in the same manner as it penetrates the layers 12-12_N.

(Emphasis added; see paragraph [0014]. In view of Vojak et al.'s teaching that electrode portions
14b contact the cavity and preferably <u>surround</u> the cavity, Applicants submit that one of ordinary
skill in the art would not interpret Vojak et al. as teaching electrodes <u>substantially contained</u>
within a channel, as is recited in independent claim 6.

MPEP 2111.01 states:

Claim terms are presumed to have the ordinary and customary meanings attributed to them by those of ordinary skill in the art. Sunrace Roots Enter. Co. v. SRAM Corp., 336 F.3d 1298, 1302, 67 USPQ2d 1438, 1441 (Fed. Cir. 2003); Brookhill-Wilk I, LLC v. Intuitive Surgical, Inc., 334 F.3d 1294, 1298 67 USPQ2d 1132, 1136 (Fed. Cir. 2003)("In the absence of an express intent to impart a novel meaning to the claim terms, the words are presumed to take on the ordinary and customary meanings attributed to them by those of ordinary skill in the art."). It is the use of the words in the context of the written description and customarily by those skilled in the relevant art that accurately reflects both the "ordinary" and the "customary" meaning of the terms in the claims, Ferguson BeauvegardLogic Controls v. Mega Systems, 350 F.3d 1327, 1338, 69 USPQ2d 1001, 1009 (Fed. Cir. 2003).

(Emphasis added). Applicants submit that the Examiner's interpretation of "substantially contained within" is not consistent with the use of the words in the context of the written description and the use of the words by those skilled in the art.

Vojak et al. thus do not appear to teach each and every element of independent claim 6 or claim 8, which is dependent therefrom. Reconsideration and withdrawal of the rejection are respectfully requested.

Rejection under 35 U.S.C. § 103(a)

Claims 9, 10, and 15 are rejected as being unpatentable over Vojak et al. in view of Wentworth et al. (US 5,153,519). The following arguments were presented in the prior response filed July 17, 2006. The Examiner has not addressed these arguments. If this rejection is maintained, Applicants respectfully request the Examiner respond to the following arguments.

For at least the reasons set forth above, Vojak et al. do not appear to teach the basic elements of independent claim 6, from which claims 9, 10, and 15 depend. Wentworth et al. do not appear to provide what Vojak et al. lacks. Additionally, there does not appear to be any motivation, suggestion or guidance for one of ordinary skill in the art to combine the teachings of Vojak et al. and Wentworth et al. The Examiner asserts that it would have been obvious to one skilled in the art to incorporate the spectrometer of Wentworth et al. into the sensor of Vojak et al. to more accurately detect the discharge by making it possible to analyze the system both during and after the spark. The only teaching of a spark, however, appears to be in Wentworth et al. Wentworth et al. appears to teach advantages of using a spectrometer for optical inspection of the gap during the spark. This does not, however, appear to provide any motivation for one of ordinary skill in the art to incorporate the spectrometer of Wentworth et al. into the device of Vojak et al. because Vojak et al. do not appear to teach any spark being generated. Applicants submit that there is no motivation to combine Vojak et al. and Wentworth et al., and that even if one were to make such a combination, one would not arrive at the sensor as recited in the claims. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 11 and 12 are rejected as being unpatentable over Vojak et al. in view of Wentworth et al. as applied to claim 9, and further in view of Wiegand, Jr. (US 3,657,600). Claims 13 and 14 are rejected as being unpatentable over Vojak et al., Wentworth et al., Wiegand, Jr., and Pompei et al. (US 4,016,524). The following arguments were presented in the

prior response filed July 17, 2006. The Examiner has not addressed these arguments. If this rejection is maintained, Applicants respectfully request the Examiner respond to the following arguments.

For at least the reasons set forth above, Vojak et al. do not appear to teach the basic elements of independent claim 6, from which claims 11-14 depend. None of Wentworth et al., Wiegand, Jr., or Pompei et al. appear to provide what Vojak et al. lacks. Thus, any combination of the references also fails to teach or suggest each and every element of the claims. Further, claims 11-14 recite additional elements not found or suggested by the references.

Reconsideration and withdrawal of the rejections are respectfully requested.

Reconsideration and reexamination are respectfully requested. It is submitted that, in light of the above remarks, all pending claims are now in condition for allowance. If a telephone interview would be of assistance, please contact the undersigned attorney at 612-677-9050.

Respectfully submitted,

Date: 11-27-06

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